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EXAMINER
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PHAM, THIERRY L

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* NORISHIGE KAKUNO

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Appeal 2007-3097  
Application 09/624,224<sup>1</sup>  
Technology Center 2600

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Decided: May 14, 2008

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Before ANITA PELLMAN GROSS, MAHSHID D. SAADAT,  
and MARC S. HOFF, *Administrative Patent Judges*.

HOFF, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF CASE

Appellant appeals under 35 U.S.C. § 134 from a Final Rejection of claims 1-20. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm-in-part.

Appellant's invention relates to providing a printer device and printer system flexibly compatible with many languages (Spec. 6). The inventive method determines the type of language of input print data, selects an

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<sup>1</sup> Application filed July 24, 2000. The real party in interest is Seiko Epson Corporation.

intermediate code generating means and delivers print data to it, selects the appropriate intermediate code rasterizing means, stores rasterized print image information, and prints on the basis of the stored print image information (Spec. 6-7).

Claims 1 and 17 are exemplary:

1. A printing system comprising:

a host operable to output print data compatible with at least one of a plurality of different printer languages;

a data processing device comprising a plurality of intermediate code generators, at least one being operable to generate intermediate code compatible with the print data by performing a language analysis of the print data, and a plurality of intermediate code rasterizing means for respectively rasterizing the generated intermediate code into print image information; and

a printer comprising printing means for controlling the print image information rasterized by the intermediate code rasterizing means to be stored in a prescribed storage area of said printer, and printing on the basis of said stored print image information.

17. A printing method to be used in a printer system combining a printer device and a data processing device, comprising:

a determination step for determining the type of language of input print data, selecting an intermediate code generating means on the basis of the determination result, and delivering said print data to said selected intermediate code generating means, in said printer device; and

an intermediate code generating step for generating the intermediate code compatible with the print data by performing language analysis of print data, and outputting the intermediate code identification information, in an intermediate code generating means of said printer device or an intermediate code generating means of said data processing device; and

a print control step for selecting an intermediate code rasterizing means on the basis of intermediate code identification information input from the intermediate code generating means, controlling print image information rasterized by said selected intermediate code rasterizing means to be stored in a prescribed storage area of said printer device, and printing on the basis of said stored print image information, in said printer device.

The prior art relied upon by the Examiner in rejecting the claims on appeal is:

Parker	US 6,441,919 B1	Aug. 27, 2002
Suzuki	EP 0 820 004 A1	Jan. 21, 1998

Claims 17-20 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Suzuki.

Claims 1-16 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Suzuki in view of Parker.

Appellant contends, *inter alia*, that Suzuki does not teach selecting an intermediate code generating means, nor selecting an intermediate code rasterizing means, because Suzuki does not “select” from a plurality of input intermediate code types (App. Br. 11-12).

Rather than repeat the arguments of Appellant or the Examiner, we make reference to the Brief (filed May 8, 2005), the Reply Brief (filed August 4, 2005) and the Answer (mailed June 6, 2005) for their respective details.

## ISSUE

There are two principal issues in the appeal before us.

The first issue is whether the Examiner erred in holding that Suzuki in combination with Parker teaches a data processing device comprising a plurality of intermediate code generators, at least one operable to generate intermediate code compatible with the print data by performing a language analysis of the print data, and a plurality of intermediate code rasterizing means.

The second issue is whether the Examiner erred in holding that Suzuki teaches selecting an intermediate code rasterizing means on the basis of intermediate code identification information input from the intermediate code generating means.

#### FINDINGS OF FACT

The following Findings of Fact (FF) are shown by a preponderance of the evidence.

##### *The Invention*

1. According to Appellant, he has invented providing a printer device and printer system flexibly compatible with many languages (Spec. 6). The inventive method determines the type of language of input print data, selects an intermediate code generating means and delivers print data to it, selects the appropriate intermediate code rasterizing means, stores rasterized print image information, and prints on the basis of the stored print image information (Spec. 6-7).
2. Appellant discloses that his printer device and data processing devices do not need to be physically separated; for example, they may be set up within one printer body (Spec. 10).

*Suzuki*

3. Suzuki teaches a print system in which a host computer includes a print driver used to generate print job data, including intermediate level print job data (col. 2, ll. 11-19).

4. In Suzuki, the printer includes intermediate code conversion means used to receive intermediate level print job data and convert plotting commands of the intermediate level job data into a second intermediate code (col. 2, ll. 21-25).

5. Within controller 11, language interpret part 81 of Suzuki selects an intermediate code generating means. If the input print data is in Page Description Language (PDL), the data is routed to graphics module (GRM) 83 for conversion to printer intermediate code (PIM) (col. 7, l. 53 – col. 8, l. 10).

6. If the print data input to controller 11 is in driver intermediate code (DIM), the data is routed to intermediate code conversion part 85 for conversion to printer intermediate code (PIM)(col. 7, l. 53 – col. 8, l. 10).

7. Suzuki teaches that the graphics module (GRM) reads PIM code stored in code buffer 13 and develops a bitmap image on the image buffer in accordance with the read-out PIM code (col. 8, ll. 30-34).

*Parker*

8. Parker teaches a technique for rendering a description of a print area, the description including graphical objects and their paint order, the graphical objects including one or more reusable objects and one or more other objects (col. 1, ll. 58-62).

*Dictionary definition of “select”*

9. “Select” is defined as “to choose in preference to another or others; pick out,” select. (n.d.). *Dictionary.com Unabridged (v 1.1)*.

Retrieved May 06, 2008, from Dictionary.com website:

<http://dictionary.reference.com/browse/select>

PRINCIPLES OF LAW

Anticipation is established when a single prior art reference discloses expressly or under the principles of inherency each and every limitation of the claimed invention. *Atlas Powder Co. v. IRECO, Inc.*, 190 F.3d 1342, 1347 (Fed. Cir. 1999); *In re Paulsen*, 30 F.3d 1475, 1478-79 (Fed. Cir. 1994).

In rejecting claims under 35 U.S.C. § 103, the Examiner bears the initial burden of establishing a prima facie case of obviousness. *In re Piasecki*, 745 F.2d 1468, 1472 (Fed. Cir. 1984). The Examiner can satisfy this burden by showing some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness. *KSR Int’l. v. Teleflex Inc.*, 127 S. Ct. 1727, 1741 (2007) (citing *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006)). Only if this initial burden is met does the burden of coming forward with evidence or argument shift to the Appellant. *Piasecki*, 745 F.2d at 1472. Thus, the Examiner must not only assure that the requisite findings are made, based on evidence of record, but must also explain the reasoning by which the findings are deemed to support the Examiner’s conclusion.

During *ex parte* prosecution, claims must be interpreted as broadly as their terms reasonably allow since Applicants have the power during the administrative process to amend the claims to avoid the prior art. *In re Zletz*, 893 F.2d 319, 322 (Fed. Cir. 1989).

## ANALYSIS

### *Claims 17-20*

We select claim 17 as representative of this group, pursuant to our authority under 37 C.F.R. § 41.37(c)(1)(vii).

Appellant argues that Suzuki does not teach determining the type of language of input print data and selecting an intermediate code generating means on the basis of the determination result (App. Br. 11), nor selecting an intermediate code rasterizing means on the basis of intermediate code identification information from the intermediate code generating means (App. Br. 13-14).

Appellant argues that “determining the type of language of input print data” is to be interpreted as determining which of a plurality of printer control languages (PCL) is input to the printer, as detailed in Embodiment 1 of the instant invention (Spec. 10). The Examiner reads Suzuki as determining the type of language of input print data, between Page Description Language (PDL), and intermediate code generated by the print driver of Suzuki’s host computer, known as driver intermediate code (DIM) (Ans. 10; Suzuki col. 7, l. 53 – col. 8, l. 10), and we concur with the Examiner’s interpretation. As shown in Figure 4 of Suzuki, in response to commands included in job data, language interpret part 81 selects an



intermediate code generating means. If the input print data is in PDL, the data is routed to graphics module (GRM) 83 for conversion to printer intermediate code (PIM) (FF 5); if the input print data is in DIM, the data is routed to intermediate code conversion part 85 for conversion to PIM (FF 6). Suzuki therefore teaches two *means* (GRM 83 and intermediate code converter 85) that *generate intermediate code* (PIM), as required by claim 17. Contrary to Appellant's assertions, the claim does not require that a plurality of high-level PCL be contemplated as possible inputs to the determination step or the intermediate code generating step.

We disagree, however, with the Examiner's position that the claims do not require selecting the rasterizing means from *a plurality* of items (Ans. 11). The dictionary definition of "select" is "to choose in preference to another or others; pick out" (FF 9). The Examiner's position (Ans. 11) that "selecting" does not require choosing from a plurality of items is thus incorrect. The broadest reasonable interpretation of the claim, then, requires selecting from among at least one intermediate code rasterizing means and at least one other item. The Examiner points to the bit map image developed based on the read-out PIM code by controller 11 (Ans. 10), but does not indicate where Suzuki teaches selecting an intermediate code rasterizing means from among a plurality of choices, and we cannot locate such a teaching in the reference.

We, therefore, agree with Appellant that Suzuki does not teach all of the elements recited in claim 17 and find error in the Examiner's rejection of claims 17-20 under 35 U.S.C. § 102.

*Claims 1, 4/1, 5/4/1, 6/4/1, 7/4/1, and 8-12*

We select claim 1 as representative of this group, pursuant to our authority under 37 C.F.R. § 41.37(c)(1)(vii). Claims 4/1, 5/4/1, 6/4/1, 7/4/1, and 8-12 are discussed under separate headings, but no separate argument is advanced in favor of their patentability.

Appellant argues that Suzuki, alone or in combination with Parker, does not teach a *data processing device* that comprises a plurality of intermediate code generators, as the Examiner asserts, because a single printer control language (PCL) is used in Suzuki's host computer (App. Br. 16). As noted *supra*, however, we agree with the Examiner's position that Suzuki teaches a plurality of intermediate code generators (*i.e.*, GRM 83 and intermediate code conversion part 85)(FF 5, 6).

With respect to Appellant's argument that the intermediate code generators of Suzuki are not located in the "data processing device" (Reply Br. 7), we find that one may fairly interpret the hardware elements of Suzuki's converter 11 to be part of the data processing device, because the distinction between "data processing device" and "printer" is largely semantic, apart from the parts of the printer responsible for physical *printing*. Buttressing this interpretation, as the Examiner explains (Ans. 12), is Appellant's own Specification, which discloses that the data processing device may be set within one printer body (FF 2).

We therefore do not find error in the Examiner's rejection of claims 1, 4/1, 5/4/1, 6/4/1, 7/4/1, and 8-12 under 35 U.S.C. § 103.

*Claims 2, 3, 4/2, 4/3, 5/4/2, 5/4/3, 6/4/2, 6/4/3, and 7/2*

Appellant argues that Suzuki does not disclose a printer that comprises a plurality of intermediate code generators, as the claim requires (App. Br. 17-18; Reply Br. 7). As noted *supra* with respect to claim 1, however, we agree with the Examiner's position that Suzuki does disclose a printer having a plurality of intermediate code generators (Fig. 4; FF 5, 6).

We therefore do not find error in the Examiner's rejection of claims 2, 3, 4/2, 4/3, 5/4/2, 5/4/3, 6/4/2, 6/4/3, and 7/2 under 35 U.S.C. § 103.

*Claims 13-16*

Appellant argues that Suzuki does not teach a data processing device to be used in combination with a printer, wherein the data processing device comprises a plurality of intermediate code generating means (Reply Br. 8). As noted *supra* with respect to claim 1, however, we find that one may fairly construe controller 11 of Suzuki as being part of the data processing device of Suzuki. Because we find that Suzuki teaches a plurality of intermediate code generating means, then, we find Appellant's argument unpersuasive.

For the reasons expressed *supra* with respect to claim 1, we conclude that Suzuki in combination with Parker renders claim 13 obvious. We do not find error in the Examiner's rejection of claims 13-16 under 35 U.S.C. § 103.

CONCLUSION

We conclude that Appellants have not shown that the Examiner erred in rejecting claims 1-16. Claims 1-16 are not patentable.

We conclude that Appellants have shown that the Examiner erred in rejecting claims 17-20. On the record before us, claims 17-20 have not been shown to be unpatentable.

#### DECISION

The Examiner's rejection of claims 1-16 is affirmed. The Examiner's rejection of claims 17-20 is reversed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

#### AFFIRMED-IN-PART

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